



[Home](#) | [Organizers](#) | [Proceedings Editors](#) | [Proceedings Contributors](#) | [Search](#) |

COMPLEX PHYSICAL, BIOPHYSICAL AND ECONOPHYSICAL SYSTEMS

Proceedings of the 22nd Canberra International Physics Summer School

The Australian National University, Canberra, 8 - 19 December 2008

CONTENTS

FRONT MATTER	i
Introduction to Complex and Econophysics Systems: A navigation map <i>T. Aste and T. Di Matteo</i>	1
An Introduction to Fractional Diffusion <i>B. I. Henry, T. A. M. Langlands and P. Straka</i>	37
Space Plasmas and Fusion Plasmas as Complex Systems <i>R. O. Dendy</i>	91
Bayesian Data Analysis <i>Michael S. Wheatland</i>	121
Inverse Problems and Complexity in Earth System Science <i>I. G. Enting</i>	143
Applied Fluid Chaos: Designing Advection with Periodically Reoriented Flows for Micro to Geophysical Mixing and Transport Enhancement <i>Guy Metcalfe</i>	187
Approaches to Modelling the Dynamical Activity of Brain Function Based on the Electroencephalogram <i>David T. J. Liley and Federico Frascoli</i>	241
Jaynes' Maximum Entropy Principle, Riemannian Metrics and Generalised Least Action Bound <i>Robert K. Niven and Bjarne Andresen</i>	283
Complexity, Post-genomic Biology and Gene Expression Programs <i>Rohan B. H. Williams and Oscar Junhong Luo</i>	319
Tutorials on Agent-based Modelling with NetLogo and Network Analysis with	351

[Pajek](#)

Matthew J. Berryman and Simon D. Angus

[BACK MATTER](#)

377

[Back](#)